

What is claimed is:

- 1 1. A device comprising:
2 more than one spring electrical contact to contact a first surface of an
3 object, said first surface of said object to have a material electrodeposited thereon; and
4 a base to directly support said first surface of said object without being
5 directly connected to said spring electrical contacts, said base to distribute the force to
6 seal a second surface of said object.

- 1 2. The device of claim 1 including a soft, acid resistant material disposed on
2 said base.

- 1 3. The device of claim 1 wherein said base is spaced inward from said
2 contacts.

- 1 4. The device of claim 1 wherein said spring electrical contacts are connected
2 to a frame.

- 1 5. The device of claim 4 wherein said spring electrical contacts are resilient
2 beams that terminate with tips.

- 1 6. The device of claim 5 wherein said object has an outer edge, said base to
2 distribute a force at said object outer edge and said tips to contact said object inward from
3 said base.

- 1 7. The device of claim 4 wherein said base and said frame are annular.

1 8. The device of claim 4 wherein said frame and said beams are coated with
2 an acid-resistant material.

1 9. The device of claim 1 wherein said base substantially continuously
2 contacts said surface.

1 10. The device of claim 1 wherein said spring electrical contacts
2 independently deflect while electrical contact is made with said object.

1 11. A system comprising:
2 a frame having spring electrical contacts to electrically contact a first
3 surface of an object to enable electrodeposition on said object first surface;
4 a base to directly support said object, said base and said frame not directly
5 connected; and
6 a sealing ring to seal a second surface of said object to prepare for
7 electrodeposition.

1 12. The system of claim 11 including a plating cell to house said object for
2 electroplating.

1 13. The system of claim 12 including an electrode.

1 14. The system of claim 13 including a power supply.

1 15. The system of claim 14 including a thrust plate and a seal plate.

1 16. The system of claim 11 wherein said base is annular
2 defining an annular
aperture.

1 17. The system of claim 11 wherein said base is to distribute the force required
2 to seal said second surface of said object.

1 18. The system of claim 11 wherein said object is a wafer and a metal or metal
2 alloy is to be deposited on said first surface.

1 19. The system of claim 11 wherein said object is a wafer and copper or an
2 alloy including copper is to be deposited on said first surface.

1 20. The system of claim 11 wherein said spring electrical contacts apply a
2 variable force less than the force that if applied would exceed the mechanical strength of
3 said object.

1 21. A method comprising:
2 sealing a second side of an object to prepare said object for
3 electrodeposition;
4 directly physically supporting said object on a first side to enable said
5 sealing; and
6 electrically contacting said first side of said object with spring electrical
7 contacts to facilitate electrodeposition, said electrical spring contacts and said support not
8 in direct contact.

1 22. The method of claim 21 including distributing the force to seal said second
2 side of said object about the periphery of said object.

1 23. The method of claim 21 including applying a variable force with said
2 spring electrical contacts to facilitate electrodeposition.

1 24. The method of claim 23 including determining the length and the
2 maximum displacement of said spring electrical contacts.

1 25. The method of claim 21 including distributing the force to seal said second
2 side of said object without exceeding the strength of said object first side.

1 26. The method of claim 21 including depositing a conductive material on said
2 object first side.

1 27. The method of claim 26 including depositing a metal or metal alloy on
2 said object first side.

1 28. The method of claim 21 including displacing adjacent spring electrical
2 contacts with respect to said object first side.

1 29. The method of claim 21 including initially contacting said object with said
2 spring electrical contacts, said initial contact having little or no associated force.

1 30. The method of claim 21 including electrically contacting said first side of
2 said object without exceeding the strength of said object first side.